



### **3.16 VISUAL RESOURCES**

This section describes the visual character of the general Project Area. The beauty of the natural landscape is an important component of the quality of life in Humboldt County. Humboldt County is rich in spectacular scenery as evidenced by the creation of preserves such as Redwood National Park, Humboldt Redwoods State Park, and Grizzly Creek Redwoods State Park. Historically, Humboldt County has also been a major timber-producing county. Balancing the desire for attractive natural settings with the demands of timber production has been challenging for all parties concerned and, at times, contentious.

#### **3.16.1 Affected Environment**

The following discusses existing visual resource management, protection measures, and existing visual conditions.

##### **3.16.1.1 Visual Resource Protection**

Four entities regulate lands in the Project Area; each one has policies in place that address visual quality. The entities are CDF, the California Department of Transportation, Humboldt County, and PALCO. The following briefly discusses the policies of the entities.

##### **California Department of Forestry and Fire Protection (CDF)**

The California Forest Practice Rules (FPRs) are administered by the California Board of Forestry, which is part of CDF. The FPRs have a visual resources component that is a required part of the timber harvest planning process (Personal communication, J. Marshall, Deputy Chief, Resource Management, CDF, Fortuna, California,

March 19, 1997). The FPRs require analysis of a proposed timber harvest's contribution to the cumulative visual effects of the area in which the harvest is to take place. Areas to be analyzed for visual effects are less than three miles from a proposed timber operation that is readily visible to significant numbers of people. It is assumed that, in most conditions, viewers more than three miles from the operation would not be affected by timber harvest activities.

The FPRs may require special silvicultural considerations (including buffers) for timber operations that occur within 200 feet of the edge of permanent roads maintained by the local county or the state. Special considerations may also be given to silvicultural methods used for timber harvest that occurs within 200 feet of non-federal lands in areas that are not designated as timber production zones. In areas that are designated as timber production zones, harvest can occur next to highways and roads.

The FPRs influence the methods of timber harvest and the effects such harvest has on visual quality. Sections 913.1, 933.41, and 953.1 of the FPRs discuss regeneration methods used in even-aged management. The following apply to visual quality:

- Even-aged units within an ownership will be separated by a logical logging unit that is at least as large as the area being harvested or 20 acres, whichever is smaller. Units are to be separated by at least 300 feet in all directions. An even-aged unit may not be established next to a previously harvested unit unless the regenerated trees in the existing harvest unit average at least

five years of age or average at least five feet in height and three years of age. The FPRs also suggest that, when practical, clearcuts be irregularly shaped and variable in size to mimic natural patterns and features found in landscapes.

- Places with unusual values may be designated as special treatment areas by the Board of Forestry (BOF). In special treatment areas, consideration of aesthetic resources determines the choice of silvicultural prescriptions that will be used in the special treatment area. Lands that are within 200 feet of federal- or state-designated wild and scenic rivers are considered special treatment areas. The special treatment area designation applies to the section of the Eel River that passes next to PALCO lands, approximately between Scotia and Whitlow.
- Special treatment areas can also be applied to scenic highways and roads in the California coastal zone. Timber harvest may, however, occur next to roads in special treatment areas if aesthetic considerations are made. The BOF has not designated any sections of highway near PALCO lands as special treatment areas.

### **California Department of Transportation**

Sections of US 101 and SR 36 in central Humboldt County have been included in the California Scenic Highway Program by the California Department of Transportation (DOT) (State of California, 1996). US 101 passes through the western portion of PALCO lands (Figure 1.2-1). SR 36 is situated along the Van Duzen River valley and passes through PALCO lands. The state DOT requires that the local jurisdiction adopt protection measures for scenic highways.

## **Humboldt County**

The Humboldt County Plan (Humboldt County, 1996a) addresses scenic highways (Section 3540) and includes policies and standards (Humboldt County, 1996a). It includes a section for scenic highways and has designated a portion of US 101 north of Orick (which is approximately 45 miles north of PALCO lands) as scenic highway. The Plan states that CDF will control and regulate timber harvesting along scenic highways in areas that allow timber harvesting.

### **3.16.1.2 Existing Visual Conditions**

Humboldt County and the portion of it that surrounds PALCO lands contain both preserved and working forest lands. Evidence of timber activities can be viewed throughout the Project Area on PALCO and other commercial timber lands. The primary viewing areas from which PALCO and other timber production lands can be seen include highways, roads, residential areas, and parks. The following discussion briefly describes some of the primary viewing areas from which PALCO lands can be seen. Key viewing areas (KVAs) are also designated. They are used to evaluate visual effects from PALCO timber harvest operation.

### **Residential Areas**

A number of communities and residential areas are close to PALCO lands. PALCO lands can be seen from many of these communities and residential areas. Signs of recent harvest, including clearcuts on PALCO and other commercial timber lands, are evident from many areas. In other areas, there are no signs of recent harvest, and nearby timber production lands appear to be essentially unaltered. The following communities were selected as representative of different views from residential areas close to PALCO lands.

## **FRESHWATER AREA**

Freshwater is a rural residential area located approximately 3.5 miles east of the boundary of the City of Eureka. The center of the community includes the Grange Hall, the Garfield school, and historic residences. Newer residences are found along Freshwater-Kneeland Road. Forested hillsides, most of which are owned by PALCO, surround the community and help define its boundaries.

The KVA selected for the Freshwater community (KVA 1) is from the Freshwater-Kneeland Road looking at the Garfield school. Residences can be seen behind the school, as can PALCO lands approximately 0.25 mile farther south (Figure 3.16-1).

## **CARLOTTA**

The Carlotta community is a mix of residential and industrial (logging) uses and lies in the Van Duzen River valley. The community is bisected by SR 36. Fisher Road connects with SR 36 and provides access to PALCO lands in the Yager Creek drainage. Varying amounts of timber harvest on the hillsides bordering the river valley are visible from the Carlotta area. PALCO owns hillside lands north of Carlotta that are visible from throughout the community.

The KVA selected to represent Carlotta (KVA 2) is located on Fisher Road looking east across pasture lands toward PALCO lands that are above Yager Creek and approximately 0.5 mile away from KVA 2. Recent clearcuts can be observed on the hillsides (Figure 3.16-2).

## **Highways and Roads**

Some of the more prominent highways and roads from which PALCO lands can be viewed include US 101, which passes from southeast to northwest through the southern portion of the PALCO properties; the "Avenue of the Giants," which is a 31-mile-long portion of old US 101 that

parallels new US 101; SR 36 which passes from east to west through the central portion of the PALCO lands; and the Freshwater-Kneeland Road, a county road that passes through lands in the northeastern portions of the PALCO properties.

Representative views along each of the above-mentioned highways and roads were selected to describe existing visual conditions and to indicate how the various alternatives would change existing visual conditions.

## **AVENUE OF THE GIANTS (OLD US 101)**

The Avenue of the Giants (the Avenue) is a 31-mile-long portion of old US 101 that parallels new US 101. The Avenue is a major regional feature that is driven by visitors from around the world. The southern terminus of the Avenue is near Phillipville, and the northern terminus is near Pepperwood. The Avenue passes near PALCO lands between approximately Burlington and Pepperwood. Some sections of the Avenue are completely surrounded by trees and/or steep terrain both of which screen views of harvest activities on PALCO lands. In other areas, such as where the Avenue is close to the Eel River, or where there are pastures or other openings, PALCO lands can be viewed on nearby hillsides. Areas of PALCO lands that have been harvested can be viewed from some of the open areas through which the Avenue passes.

The KVA selected to represent the Avenue (KVA 3) is located near Pepperwood. The view from this KVA includes a pasture and hills beyond it (Figure 3.16-3). The closest portion of the PALCO lands (at the base of the hillside) is approximately 0.75 mile away. Recent harvesting along the top of a ridge approximately 1.5 to 1.75 miles away can be readily observed. Potential viewers from this KVA include both tourists driving



**Figure 3.16-1** KVA 1 Freshwater Area - view from Freshwater-Kneeland Road looking south near Garfield school. PALCO lands can be seen behind the community.



**Figure 3.16-2** KVA 2 Carlotta Area - view looking north from Fisher Road up Yager Creek drainage. PALCO lands can be seen on the hillsides.

the Avenue and local residents using the road.

### **US HIGHWAY 101**

Views of PALCO lands from US 101 are similar to those from the Avenue. Because of the greater width of the US 101 right-of-way, however, the viewshed is wider, and there are more opportunities to see PALCO lands. In areas along the South Fork and the main stem of the Eel River, views of PALCO lands that are on the opposite side of the river from the highway are plentiful.

The KVA selected to represent US 101 (KVA 4) is an overlook next to US 101 approximately one mile southeast of Stafford. Included in the view is US 101, the Eel River valley, and part of the Eel River. PALCO lands on the north side of the Eel River are clearly visible directly across the Eel River valley (Figure 3.16-4). The closest PALCO lands are approximately 0.5 mile away. Four recent clearcuts on PALCO lands can also be observed (the closest is approximately 1.5 miles away). The photograph representing this KVA includes US 101, the PALCO land above Shively Road, part of the Eel River valley, and several recent clearcuts. Only people who made the effort to pull off to the side of the road would see this view. This could include both tourists and local residents.

### **STATE ROUTE HIGHWAY 36**

SR 36 enters the Project Area from the east and follows the Van Duzen River valley. The highway passes through or very close to PALCO lands from approximately 0.25 mile east of Grizzly Creek State Park almost to the community of Carlotta. From the highway, there are numerous views of the Van Duzen River and PALCO lands next to it, along with views of adjacent hillsides owned by PALCO. The highway passes through Grizzly Creek Redwood State Park and the community of River Park.

The KVA chosen to represent Highway 36 (KVA 5) is located near the west entrance to Grizzly Creek Redwoods State Park. PALCO lands can be seen along the top portion of the hillside above and approximately 0.25 mile beyond the KVA (Figure 3.16-5). People who view the scene in this KVA include visitors to Grizzly Creek State Park and people driving along SR 36.

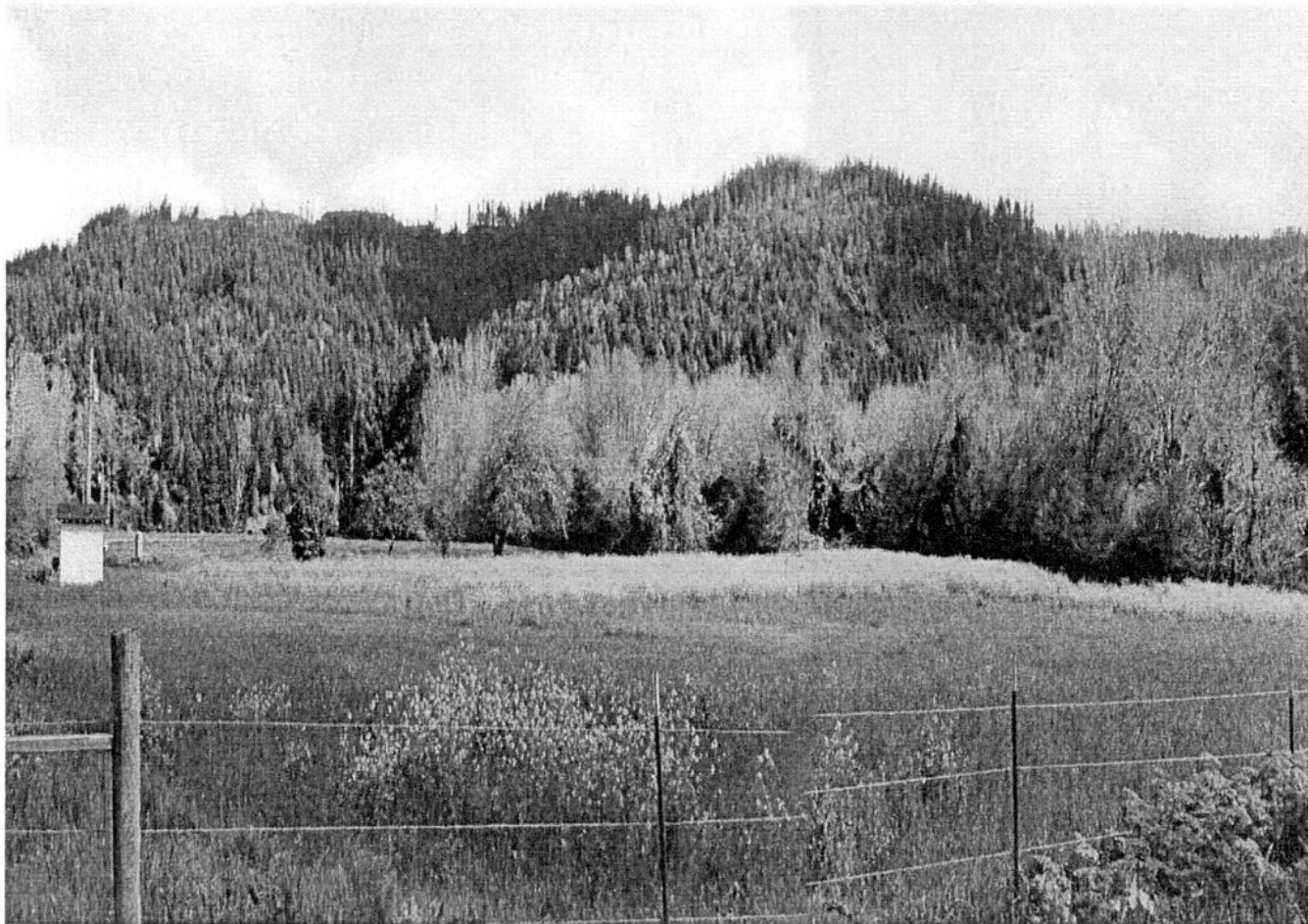
### **FRESHWATER-KNEELAND ROAD**

Freshwater-Kneeland Road passes along the Freshwater Creek valley through Freshwater and Kneeland. The character of the valley floor is rural residential with generally forested hillsides on either side of the valley floor. PALCO owns much of the hillsides surrounding Freshwater. To date PALCO has done relatively little harvesting next to the center of Freshwater. Beyond the center of Freshwater, PALCO has harvested lands that are visible from the Freshwater-Kneeland Road.

The view selected for the Freshwater-Kneeland Road (KVA 6) is from Grange Road in Freshwater. From the KVA, the Freshwater-Kneeland Road can be viewed, along with several residences and forested PALCO lands in the background. The residences and forested area are approximately 0.5 mile from the KVA (Figure 3.16-6). Potential viewers from this KVA are primarily residents of Freshwater and Kneeland who drive along this section of the Freshwater-Kneeland Road.

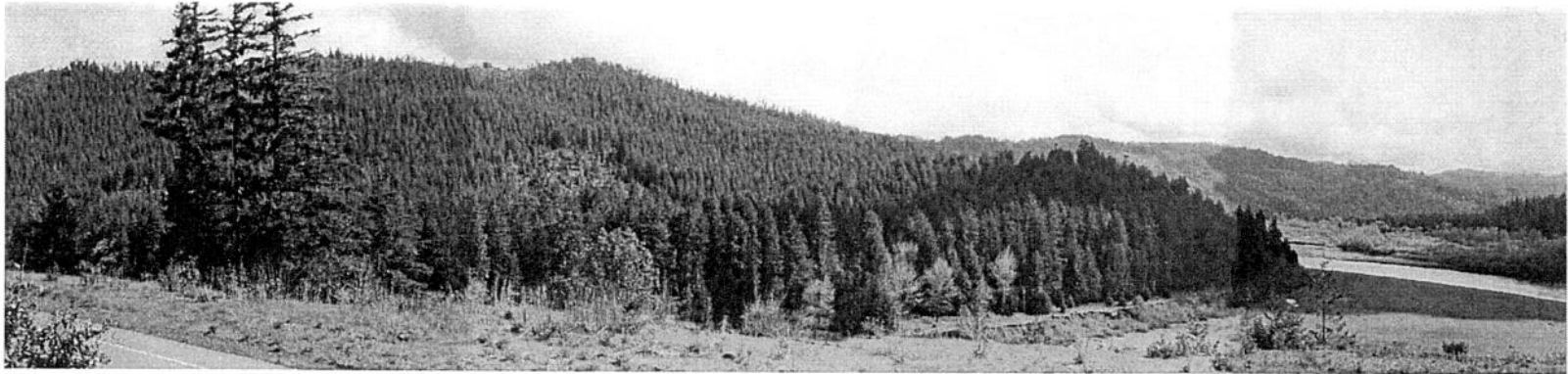
### **State Parks**

Two state parks, Humboldt Redwoods State Park and Grizzly Creek State Park, are next to PALCO lands. Both of the parks have trails, roads, and highways from which PALCO lands can be viewed. Areas within the parks from which PALCO lands can be viewed are generally located along roads, highways, and trails, or are close to the edges of the parks. On adjacent PALCO and other timber lands that have not been



**Figure 3.16-3** KVA 3 Avenue of th Giants (South of Pepperwood) - view looking north at PALCO lands on hillside.



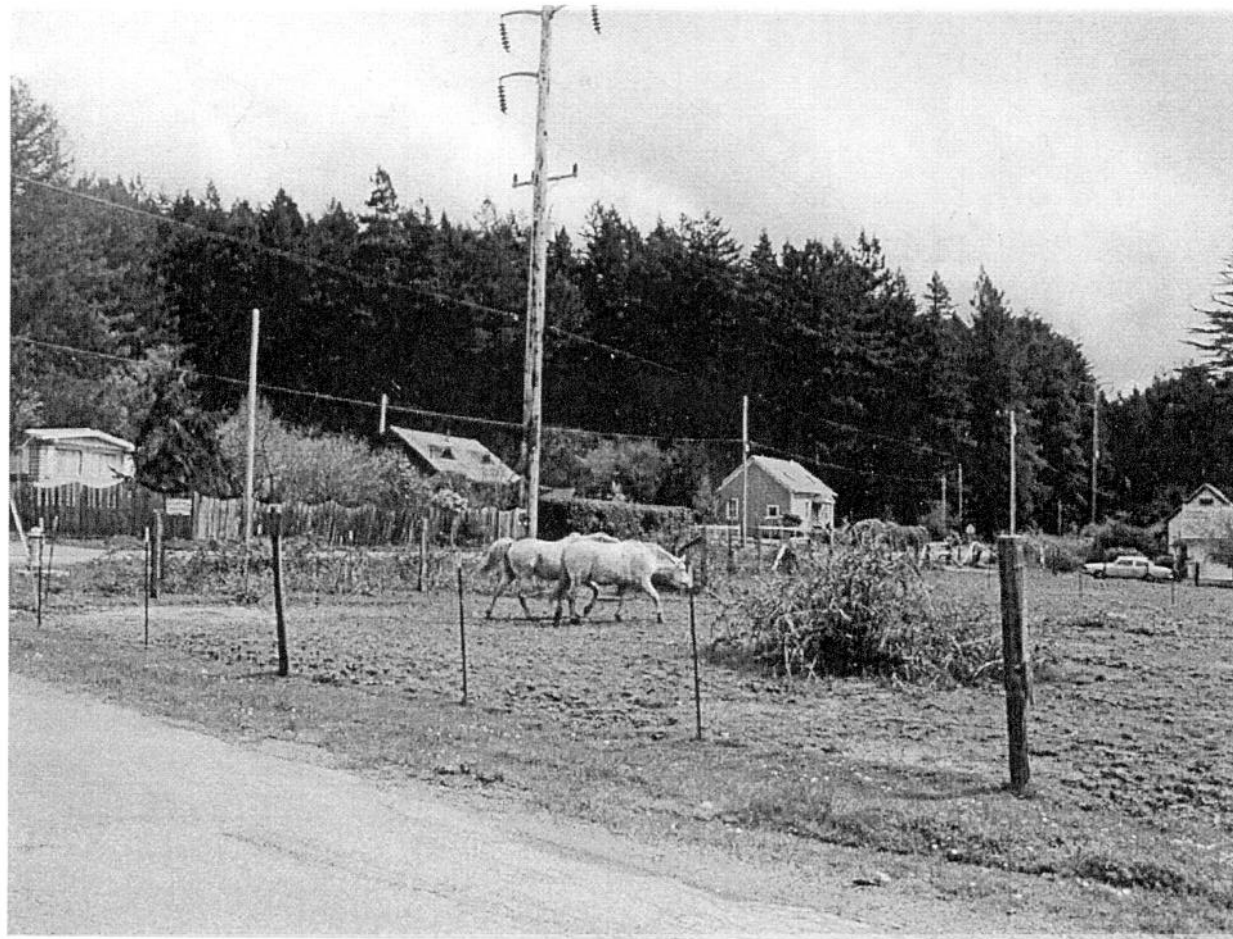


**Figure 3.16-4** KVA 4 US Highway 101 (south of Stafford) - view looking north across pasture at PALCO lands on hillside.





**Figure 3.16-5** KVA 5 Highway 36 (west near entrance to Grizzly Creek State Park) - view looking southwest at state park land and PALCO land above on upper hillside.



**Figure 3.16-6** KVA 6 Freshwater-Kneeland Road - view is from from Grange Road looking north at Freshwater Kneeland Road and tress on PALCO lands behind road.

harvested, the boundary of the parks is not apparent. In some areas where harvest has occurred on nearby private lands, the boundary is quite apparent.

The approximately 400-acre Grizzly Creek Redwoods State Park is surrounded by PALCO lands. Areas from which PALCO lands can be viewed include Highway 36, along and near some segments of the Van Duzen River, parts of the campground, and parts of some trails. The KVA selected to represent Grizzly Creek Redwoods State Park (KVA 7) is next to the Van Duzen River looking south at a hillside and ridge of PALCO land approximately 0.25 mile away (Figure 3.16-7). This represents the view that people using the river would have of the hillside.

Humboldt Redwoods State Park is largely surrounded by PALCO lands. PALCO lands can be seen within the approximately 51,200-acre park. Trails and dirt roads allow people to access remote parts of the park. PALCO lands can be observed from some of the trails and dirt roads. People driving along US 101 represent the greatest numbers of viewers of PALCO lands in the park. KVA 8 was selected to represent the view people driving through the park have of PALCO lands. KVA 8 is located along US 101, approximately one-mile south of Redcrest. From this point, the PALCO-owned hillside approximately 0.5 mile from KVA 8 and across the Eel River can be clearly viewed (Figure 3.16-8). A recent clearcut can be seen from this KVA. A buffer of trees screens the harvest activities to a large extent.

### **3.16.2 Environmental Effects**

#### **3.16.2.1 Thresholds of Significance**

##### **California FPRs**

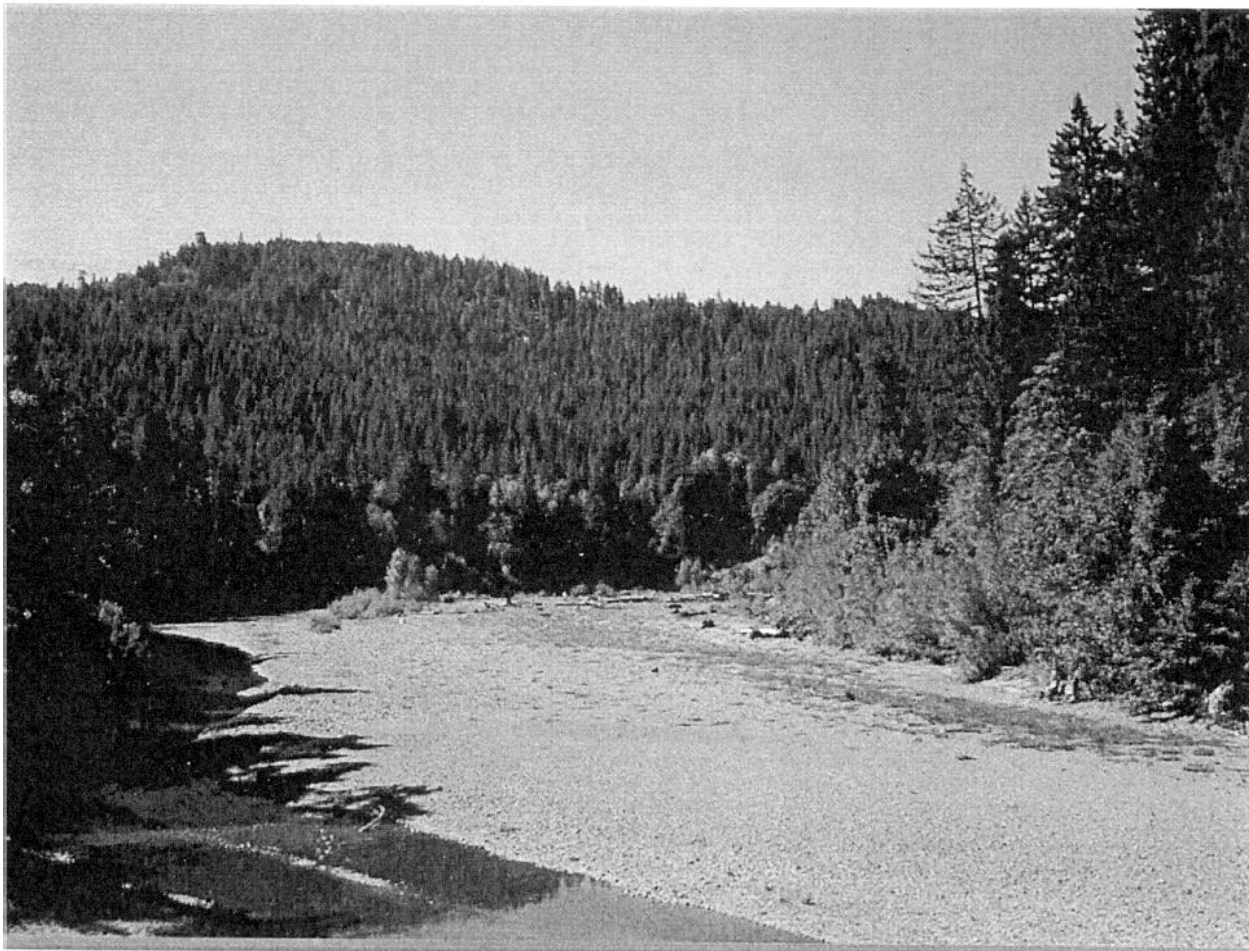
The only enforceable guidelines developed to deal with visual quality on private lands are those formulated by the CDF as part of the California FPRs. The FPRs require that a cumulative effects analysis be

conducted for areas of proposed timber harvest activity within three miles of areas from which the harvest activity would be visible to significant numbers of people. If the cumulative effects analysis indicates that an area has received too much harvest, the BOF can restrict harvest. Although CDF has used these requirements to assess individual projects, they are less useful for larger scale assessments such as that being conducted for this EIR.

The FPRs allow the BOF to require special considerations (including buffers) for timber operations within 200 feet of permanent roads maintained by the county or the state. In areas that have been designated for timber production (most of the PALCO lands), however, there are no restrictions on harvest next to highways and roads unless the BOF has designated an area as a special treatment area. The BOF has not designated any sections of highways near PALCO lands as special treatment areas. The section of the Eel River that passes by PALCO lands between approximately Scotia and Whitlow has been designated as a special treatment area. PALCO lands within 200 feet of the river would have harvest restrictions placed on them.

##### **Visual Quality Objectives**

The thresholds of significance developed for this EIR use elements of the U.S.D.A. Forest Service visual management system (VMS). The thresholds of significance for visual resources were determined by assessing the likely change to the visual quality of views of the landscape from sensitive areas such as highways, roads, residential centers, and state parks. Because Humboldt County has designated PALCO lands for forest production, harvest activities of some sort are expected to be seen. This premise includes development of thresholds of significance for this section. The key to determining a threshold of significance is the degree to which harvest



**Figure 3.16-7** KVA 7 Grizzly Creek Redwoods State Park (near Van Duzen River) - view looking southwest along River at state park land and PALCO land on hillside above the park.



**Figure 3.16-8** KVA 8 Humboldt Redwoods State Park (south of Redcrest) - view looking east across Eel River at PALCO lands.

activities might dominate a view from a sensitive viewing area, not whether harvest activities can be seen.

The U.S. Forest Service devised the Forest Service visual resource management system to help manage National Forest System lands and to protect scenery resources. The concept that timber harvest activities can dominate a view is derived from the visual resource management system. The VMS is also used to help plan and assess the impacts of timber harvest on National Forest System lands. Visual quality objectives (VQOs) are primary components of the system. Activities that would change the appearance of National Forest System lands must meet established VQOs. Each VQO has specific visual criteria that must be followed to meet the visual management objective for a particular landscape. Lands designated primarily for timber production typically are assigned VQOs of partial retention, modification, and maximum modification. These VQOs allow varying amounts of timber harvest.

The partial retention VQO allows harvest activities that are visible, but are visually subordinate to the landscape. With the modification VQO, activities can visually dominate a landscape, but must borrow from the naturally occurring form, line, texture, and scale of the landscape. Harvest units should appear to be naturally occurring features, or at least natural in form, line, color, and texture to the greatest extent possible. With the maximum modification VQO, harvest activities also visually dominate a landscape, but do not have to resemble naturally occurring features. The harvest units should have some relationship to the landscape in terms of size, form, and patterns. The Forest Service also has a category (which is not a VQO) called unacceptable modification. Harvest activities that would fall into this category include clearcut harvest units that

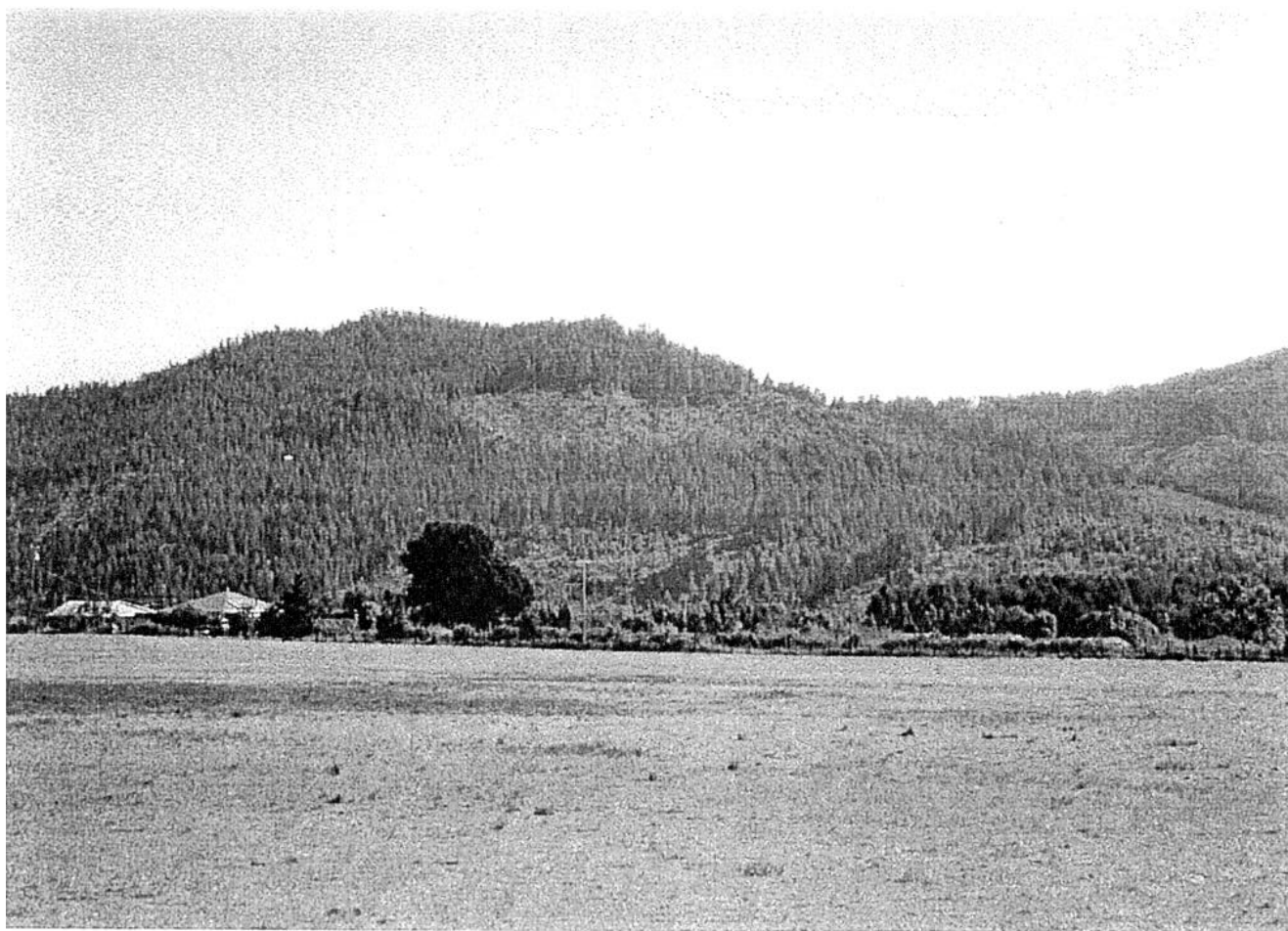
are excessive in size (excessive size is not defined) and harvest activities that are visually unrelated or unnatural in shape and pattern to the natural landscape (i.e., using all rectangular clearcuts in an area). In addition to the above-mentioned VQOs, a fourth VQO, retention will be useful for describing the effects of various alternatives on the visual characteristics of some PALCO or former PALCO lands. With the retention VQO, no harvest activities are visually evident. Some alternatives would result in some PALCO lands that have been harvested eventually reaching a condition that would meet the criteria of retention.

Figures 3.16-9 and 3.16-10 depict lands in the Project Area and the VQOs they would meet if they were National Forest System lands. Figure 3.16-9 shows a scene in which several clearcuts of various ages dominate the landscape, but have a somewhat natural shape and would be classified as modification. If the clearcut in the center of the photograph were smaller, the view from this location would arguably meet a VQO of partial retention.

Figure 3.16-10 represents a scene in which the clearcuts have more of an impact on the view than they would in a modification VQO. The clearcuts are somewhat natural in shape, but are located on top of a very visible ridge. The landscape from this location would be classified as meeting the maximum modification VQO.

Humboldt County has classified PALCO lands as timber production lands. Many of the timber production lands in the county that have been harvested would meet a VQO of maximum modification if they were National Forest System lands. Timber harvest activities on these lands have been consistent with Humboldt County zoning and have been approved by the CDF. Therefore, the second assumption in determining the threshold of significance for visual resources for this EIR is that activities on private lands that would meet





**Figure 3.16-9** A landscape that would meet a Visual Quality Objective of Modification.





**Figure 3.16-10** A landscape that would meet a Visual Quality Objective of Maximum Modification.

a VQO of maximum modification are acceptable and do not exceed the threshold of significance. Timber harvest that does not exceed maximum modification would, therefore, be characterized as not exceeding the threshold of significance.

### **3.16.2.2 Assessing the Effects of the Alternatives**

The following is an assessment of the effect of the alternatives on the visual quality of the landscape seen from each of the eight KVAs. The VQO that would be met (based on National Forest System standards for forest production lands) as a result of implementing each alternative is described. In addition, a qualitative description of what is likely to be seen at each KVA is included.

#### **Alternative 1 (No Action/No Project)**

The state and federal assumptions for assessing environmental impacts under the No Action/No Project Alternative differ due to variations in analyses required by CEQA and NEPA. CEQA implementing regulations require that an EIR discuss “the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved [14 C.C.R. 15126(d)(4)].” CEQA requires neither a projection into the long-term future that could be deemed speculative, nor a quantitative analysis of the No Action/No Project Alternative for comparison with the other alternatives. Accordingly, the state version of the No Action/No Project Alternative analyzed here contemplates only the short term and is based on individual THPs that would be evaluated case by case. The CDF version of No Action/No Project Alternative does not attempt to forecast how PALCO’s entire property would look in 50 years (the length of the proposed ITP). Since the number of THPs is unknown, where they would lie geographically, or how they would differ in

detail is unknown, no quantitative analysis of THPs is presented (see Section 2.5).

The likely No Action/No Project Alternative would consist of PALCO operating in a manner similar to current THP practices and subject to existing CDF regulatory authority. In reviewing individual THPs, CDF is required to comply with the FPA, FPRs, and CEQA through its certified functional equivalent program (see Section 1.6). The specific criteria for evaluating THPs contained in the FPRs are combined with the case-by-case evaluation of each THP for significant effects on the environment, followed by consideration of alternatives and mitigation measures to substantially lessen those effects. Under CEQA and the FPRs, CDF must not approve a project including a THP as proposed if it would cause a significant effect on the environment and there is a feasible alternative or feasible mitigation measure available to avoid or mitigate the effect. An adverse effect on a listed threatened or endangered species would be a significant effect under CEQA.

In addition, the present FPRs provide that the Director of CDF shall disapprove a timber harvesting plan as not conforming to the rules if, among other things, the plan would result in either a taking or a finding of jeopardy of wildlife species listed as rare, threatened, or endangered by the Fish and Game Commission, or a federal fish or wildlife agency or would cause significant, long-term damage to listed species. To make a determination as to the effect of a THP on listed fish or wildlife species, CDF routinely consults with state, and notifies federal, fish and wildlife agencies. These processes and independent internal review by CDF biologists can result in a THP containing additional site-specific mitigation measures similar to the ones described in the Proposed Action/Proposed Project Alternative. CDF believes that its existing process using the FPRs and the

CEQA THP-by-THP review, as well as mitigation, are sufficient to avoid take of listed species.

The mitigation by which an individual THP is determined to comply with FPRs, the federal and California ESAs, and other federal and state laws is determined first by compliance with specific standards in the FPRs and then by development of site-specific mitigation measures in response to significant effects identified in the CEQA functional equivalent environmental analysis of the individual THP. A wide variety of detailed mitigation measures tailored to local conditions is applied with the purpose of avoiding significant environmental effects and take of listed species. These include, but are not limited to, consideration of slope stability, erosion hazard, road and skid trail location, WLPZ width, BMPs on hillslopes and within WLPZs, and wildlife and fish habitat. Consequently, most significant effects of individual THPs can be expected to be mitigated to a level of less than significant through implementation of the No Action/No Project Alternative. In some cases, CDF may determine that it is not feasible to mitigate a significant effect of a THP to a level of less than significant. In such a situation, CDF would have to determine whether specific provisions of the FPRs such as not allowing take of a listed threatened or endangered species would prohibit CDF from approving the THP. If approval is not specifically prohibited, CDF would have to weigh a variety of potentially competing public policies in deciding whether to approve the THP. A THP with a significant remaining effect could be approved with a statement of overriding considerations, but such an approval would be expected to be rare.

As noted in Section 2.5, under NEPA, the degree of analysis devoted to each alternative in the EIS will be substantially similar to that devoted to the Proposed

Action/Proposed Project Alternative. The federal agencies recognize that a wide variety of potential strategies could be applied that could represent a No Action/No Project scenario and that they would involve consideration of the same mitigation measures as described above. For the purposes of analysis under NEPA, however, these additional mitigation measures are represented as RMZs, rather than management options developed for site-specific conditions. Consequently, the analysis of the No Action/No Project Alternative considers the implementation of wide, no-harvest RMZs, as well as restrictions on the harvest of old-growth redwood forest to model conditions over the short and long term. Ranges of RMZ width are considered qualitatively because it is expected that adequate buffer widths could vary as a result of varying conditions on PALCO lands.

Based on NEPA analysis, it is assumed that PALCO would continue to harvest timber on its lands under Alternative 1. Over the next 10 years, approximately 26,450 acres (or 13 percent of all PALCO lands) would be harvested using clearcut harvest techniques, approximately 8,430 acres (or four percent of all PALCO lands) would be harvested using commercial thinning techniques, approximately 1,400 acres (or one percent of all PALCO lands) would be harvested using selective harvest methods, and approximately 870 acres (less than one percent of all PALCO lands) would be harvested using seed tree harvest methods. These numbers could change depending upon the width of the RMZ that is ultimately selected. Regardless of the width of the RMZ that is selected, some of the areas being harvested would be visible from sensitive viewing areas such as state and federal highways, county roads, residential community centers, and state parks.

The following describes the visual effects Alternative 1 would have over the next 10 years on several KVAs in the Project Area.

**KVA 1—FRESHWATER (FRESHWATER-KNEELAND ROAD)**

The trees on PALCO lands that border the Freshwater community serve as a backdrop for the community. Several proposed clearcut harvest units in these lands have been designed to leave a visual buffer of old-growth trees along the edge of the PALCO property. Although the clearcut harvest units above and beyond the buffer would be seen from this KVA, the buffer would help screen some of the units and would retain the forest edge that helps define the Freshwater community. The proposed harvest would result in a visual condition that would probably meet the criteria for maximum modification. Depending upon the width and placement of the visual buffer, however, the harvest could meet a VQO of modification.

**KVA 2—CARLOTTA (FISHER ROAD)**

PALCO is the primary owner of the hills visible from this KVA. In addition to existing clearcut harvest units, several proposed clearcut units with approved THPs would also be visible from this KVA. With Alternative 1, several additional partial cut and selection harvest units would be visible from this KVA. The PALCO lands on the hillsides above Yager Creek would appear as a patchwork of harvest units of varying ages. The view from this KVA would be very typical of areas close to PALCO lands. With Alternative 1, the hillsides visible from this KVA would meet the criteria for maximum modification.

**KVA 3—AVENUE OF THE GIANTS (PEPPERWOOD)**

The PALCO lands visible from this KVA would continue to support timber harvest. In addition to the existing harvest units, several proposed clearcut units with approved THPs would also be visible when

they are harvested. Alternative 1 would include units on the lower and mid-level slopes of the hills seen from KVA 3. Eventually, the hillsides would appear as a patchwork of harvest units of different ages. People driving along this section of the Avenue of the Giants would have glimpses or full views of harvest units in varying stages of regeneration. Harvest on the hills visible from this KVA would meet the criteria for maximum modification.

**KVA 4—US 101 (OVERLOOK-REST AREA ONE MILE SOUTH OF STAFFORD)**

The hills visible from this KVA contain existing clearcut harvest units. Alternative 1 would add several clearcut harvest units to the areas visible from this KVA. Some of these units would be in the general vicinity of units with approved THPs, and some would be in new areas. The hillsides across the Eel River and up- and down-river from this KVA would appear as a patchwork of varying harvest unit ages. The PALCO lands viewed from this KVA would meet the criteria for maximum modification.

**KVA 5—SR 36 (NEAR ENTRANCE TO GRIZZLY CREEK STATE PARK).**

PALCO owns most of the hillside visible from this KVA. Most of the lower hillside between the state park and the upper hillside is in a marbled murrelet conservation area (MMCA) that contains old-growth and late seral forest. The MMCA would not be harvested. With Alternative 1, a harvest unit would be located on the upper reaches of the hillside above the MMCA. The hillside where the unit would be placed is largely screened from view by adjacent vegetation and steep topography. Although some of the northern portion of the unit should be visible from KVA 5, most of the unit should not be seen. With the northern part of the unit potentially exposed, lands viewed from this KVA should meet the criteria for moderate modification.

***KVA 6—FRESHWATER KNEELAND ROAD (FROM GRANGE ROAD NEAR FRESHWATER)***

From this KVA PALCO owns most of the nearby forested area that is visible. Several clearcut units with approved THPs would be located just behind the trees seen from this KVA. A visual buffer of trees could be left in place to maintain the edge appearance of the trees. The proposed commercial thinning that would occur in this area under Alternative 1 would be visible to varying degrees, depending upon the angle of the viewer and the intensity of the harvest near the road. When viewed straight on, it could be obvious that harvest activities have occurred, but when viewed from an angle, it would be much more difficult to tell harvest had occurred. The VQO of moderate modification would likely be met.

***KVA 7—GRIZZLY CREEK STATE PARK (ALONG THE VAN DUZEN RIVER)***

From this KVA, forested hillsides (composed of late seral and mid-successional forest) beyond the Van Duzen River can be observed. Much of the hillside is in the same MMCA that is visible from KVA 5. The proposed clearcut harvest unit associated with Alternative 1 (that should be partially visible from KVA 5) would likely not be as visible from this KVA due to screening by terrain and vegetation. As a result, the moderate modification or even partial retention VQO would be met.

***KVA 8—HUMBOLDT REDWOODS STATE PARK (NEAR US 101 OVERLOOKING THE EEL RIVER)***

The hillside above the Eel River visible from this KVA currently contains clearcut harvest units. In addition to the existing units, several proposed clearcut and commercial thinning harvest units that have had THPs approved would be visible from this KVA. Alternative 1 would locate some clearcut and commercial thinning harvest units near the existing and approved units and some in new areas. As

harvest proceeds on this hillside, the viewed landscape would take on a mosaic appearance of different harvest units at different stages of regeneration. A VQO of modification should be met; due to the level of harvest activity (primarily because of road building), however, proper siting of roads and harvest units would be important to maintain a modification VQO.

***Alternative 2 (Proposed Action/Proposed Project)***

With Alternative 2, PALCO would continue to harvest timber on its lands. Over the next 10 years approximately 34,900 acres (or 16 percent of all PALCO lands) would be harvested using clearcut harvest techniques, approximately 12,550 acres (or seven percent of all PALCO lands) would be harvested using commercial thinning techniques and approximately 3,900 acres (or two percent of all PALCO lands) would be harvested using selective harvest methods. Some of the areas being harvested would be visible from sensitive viewing areas such as state and federal highways, county roads, residential community centers, and state parks. In many locations the primary visual differences between Alternative 1 and Alternative 2, is that many of the harvest units proposed in Alternative 1 are larger in Alternative 2. In some locations, more harvest units are visible in Alternative 1, than in Alternative 2.

The establishment of the Reserve as proposed in Alternative 2 would have little, if any, effect on the visual quality of areas seen from highways, roads, residential centers, or state parks. The Reserve is located so that most of it is not visible from sensitive viewing areas.

By creating the Reserve, the public would have access to an area that was previously off limits to the public. The Reserve would be natural in appearance, but would contain existing roads and improvements

such as parking lots and restrooms to make it accessible to the public. Harvest activities proposed under Alternative 2 would be visible from some places in the Reserve and from the two access roads leading to it. Once within the Reserve, however, most be views of PALCO lands would be blocked by vegetation and topography. The Reserve would be a positive addition to the visual quality of Humboldt County for residents and visitors who appreciate old-growth redwood settings.

The following describes the visual effects Alternative 2 would have on several KVAs in the Project Area over the next 10 years.

***KVA 1— FRESHWATER (FRESHWATER-KNEELAND ROAD)***

Alternative 2 would increase the size of clearcut harvest units visible from this KVA and would eliminate the visual buffer of old-growth trees along the edge of the PALCO property. Eliminating the buffer would remove the forest edge that helps to define Freshwater and would change the character of the community for the next 30 to 50 years (until replanted trees reached similar height and mass). Alternative 2 would be result in a visual condition that would meet the criteria for maximum modification.

***KVA 2—CARLOTTA (FISHER ROAD)***

With Alternative 2, several selective harvest units on the lower hillsides visible from this KVA would be replaced with clearcuts. In addition, the size of other, more distant, visible clearcut harvest units would be larger with Alternative 2 than with Alternative 1. With Alternative 2, the hillsides visible from this KVA would meet the criteria for maximum modification.

***KVA 3—AVENUE OF THE GIANTS (PEPPERWOOD)***

Alternative 2 would have a similar effect as Alternative 1 on the hillsides seen from this KVA as Alternative 1. There would, however, be more harvest on the hillside

than with Alternative 1. Harvest on the hills seen from this KVA would result in a visual condition that would meet the criteria for maximum modification.

***KVA 4—US 101 (OVERLOOK/REST AREA ONE MILE SOUTH OF STAFFORD)***

Alternative 2 would place more large units within the viewshed of this KVA compared to Alternative 1. The hillside visible from this KVA would appear as a patchwork of varying harvest ages and would have more total units visible with Alternative 2 than with Alternative 1. The PALCO lands viewed from this KVA would meet the criteria for maximum modification.

***KVA 5—SR 36 (NEAR THE ENTRANCE TO GRIZZLY CREEK STATE PARK).***

As mentioned in Alternative 1, most of the lower hillside between the state park and the upper hillside visible from this KVA is in an MMCA that contains old-growth and late seral forest. The MMCA would not be harvested, although like Alternative 1, a harvest unit is planned on the upper reaches of the hillside above the MMCA. Although some of the northern portion of the unit should be visible from KVA 5, most of the unit should not be seen. With the northern part of the unit potentially exposed, lands viewed from this KVA should meet the criteria for moderate modification.

***KVA 6—FRESHWATER KNEELAND ROAD (FROM GRANGE ROAD NEAR FRESHWATER)***

The effect of Alternative 2 on visual quality would be similar to that of Alternative 1. The primary difference would be that there would be more harvest along the Freshwater-Kneeland Road with Alternative 2, than there would be with Alternative 1. Harvest near the road would be commercial thinning. A VQO of moderate modification would likely be met.

**KVA 7—GRIZZLY CREEK STATE PARK (ALONG THE VAN DUZEN RIVER)**

The effects on visual quality from Alternative 2 would be very similar to those of Alternative 1. As a result, the moderate modification or even partial retention VQO would be met.

**KVA 8—HUMBOLDT REDWOODS STATE PARK (NEAR US 101 OVERLOOKING THE EEL RIVER)**

Alternative 2 would have a similar effect on the hillside visible from this KVA as Alternative 1. The primary difference would be that there would be more clearcut harvest units on the upper ridges with Alternative 2. A VQO of maximum modification would be met.

**Alternative 2a (No Elk River Property)**

The effect of Alternative 2a on the visual quality of the areas near the PALCO lands would be very similar to that described in Alternative 2. Removing the Elk River Timber Company lands from the Reserve would have minor effects on visual quality in the Project Area. Elk River Timber Company lands in the Reserve are not seen from the viewing locations where people would see the Elk River Timber Company lands.

The primary effect of Alternative 2a on visual quality would be 1,764 fewer acres of the Reserve to view from within the Reserve. Currently, no Elk River Timber Company actions are being considered for approval, so there is no mechanism to address the visual effects of harvest on Elk River Timber Company lands. It can be assumed that the Elk River Company Timber lands would be harvested to the maximum extent possible under this alternative. As stated above, however, Elk River Timber Company lands are not highly visible from areas with many viewers, so the effects of this alternative on the visual quality of the Project Area would not be significant.

**Alternative 3 (Property-wide Selective Harvest)**

Alternative 3 would eliminate the use of clearcut silvicultural prescriptions on PALCO lands and would reduce the level of timber harvest compared to Alternative 2. Commercial thinning would be used instead of clearcutting. This would result in 3,262 acres (one percent of all of PALCO's land) being harvested. The reduction in harvest level and the emphasis on selective harvest would affect the visual quality of areas from which PALCO lands can be seen.

The proposed selective harvest would result in at least 20 percent of PALCO's lands being maintained as late seral forest. The remaining 80 percent would be managed to achieve a multi-layered tree canopy covering at least 60 percent of PALCO lands. The tree canopy would be spread fairly consistently across PALCO lands. In areas where harvest would occur, the visual effect would be significantly reduced from that of a clearcut. Tree canopies of harvest areas would be largely retained, and views of bare or exposed ground would be screened by the canopy.

With Alternative 3, existing clearcuts on PALCO lands that can be observed from important viewing locations such as highways and residential areas would green up. Planned timber sales with approved THPs would be carried out, and eventually would also green up. Because Alternative 3 would permit only selective harvest on all PALCO lands, eventually no signs of clearcut harvest units would be seen. People observing PALCO lands would not see the mosaic of harvest units of different stages of regeneration on PALCO lands that are currently visible and would continue to be seen under the other alternatives. Although clearcut harvest techniques would not be used on PALCO lands under this alternative, clearcut harvest techniques could still be used on other private lands.



As a result, clearcut harvest units would still be seen close to PALCO lands.

The following discusses the visual effects Alternative 3 would have on several KVAs in the Project Area over the next 10 years.

***KVA 1—FRESHWATER (FRESHWATER-KNEELAND ROAD)***

The harvest units visible from this KVA with Alternative 2 would not be included in Alternative 3. There would be no change in the existing visual condition.

***KVA 2—CARLOTTA (FISHER ROAD)***

As mentioned in Alternative 2, existing clearcut harvest units and several proposed clearcut units with approved THPs would be visible from this KVA. With Alternative 3, there would be several selective harvest units on the mid- to upper portions of slopes visible from this KVA. Although the units could be seen by people who know where to look, they probably would not be noticed by most viewers. A VQO of moderate modification would be met.

***KVA 3—AVENUE OF THE GIANTS (PEPPERWOOD)***

With Alternative 3, the hillsides visible from this KVA would contain more selective harvest units compared to Alternative 2. As would be the case with Alternative 2, people driving along the Avenue of the Giants would have glimpses or full views of working forest lands in varying stages of regeneration. Compared to Alternative 2, however, the forested areas viewed from the Avenue of the Giants would appear to be less disturbed. A VQO of modification would be met.

***KVA 4—US 101 (OVERLOOK ONE MILE SOUTH OF STAFFORD)***

The clearcuts associated with Alternative 2 that would be visible from this KVA would not be included in this alternative, nor would there be any selective harvest units on the hillside directly in front of KVA 4. Areas up and down the Elk River that are

visible from this KVA would receive significantly less harvest activity than under Alternative 2. The lands behind this KVA that would receive extensive clear cut and selective harvest under Alternative 2 would not be harvested with this alternative. The only change to the visual condition of the hillside in this view over the next 10 years would be the greening up of existing clearcut harvest units on the hillsides seen from this KVA.

***KVA 5—SR 36 (NEAR ENTRANCE TO GRIZZLY CREEK STATE PARK)***

The portion of the only clearcut that would be partially visible with Alternative 2 would not be included in this alternative. There would be no change in visual quality compared to the existing conditions with this alternative.

Large areas north of Grizzly Creek State Park (that cannot be seen from this KVA) that would be harvested under Alternative 2 (and would possibly be visible from some parts of the park) would be greatly reduced in size with this alternative. Therefore, Alternative 3 would have less of an effect on the visual quality of the PALCO lands north of Grizzly Creek State Park than Alternative 2.

***KVA 6—FRESHWATER KNEELAND ROAD (FROM GRANGE ROAD NEAR FRESHWATER)***

The harvest units that would be seen from this KVA with Alternative 2 would not be included in Alternative 3. There would, therefore, be no visible harvest and no change in visual quality from the existing conditions.

***KVA 7—GRIZZLY CREEK STATE PARK***

PALCO-owned forested hillsides beyond the Van Duzen River can be readily observed from this KVA. With this alternative no harvest units would be visible, thus, there would be no change in visual quality from the existing conditions.

***KVA 8—HUMBOLDT REDWOODS STATE PARK (NEAR US 101 OVERLOOKING THE EEL RIVER)***

Much less harvest activity would be visible from this KVA than with Alternative 2. There would be fewer clearcut units and more selective harvest units. The large area left of the center of the view from this KVA would be harvested using commercial thinning techniques.

***Alternative 4 (63,000-acre, No-harvest Public Reserve)***

Under Alternative 4, 63,673 acres of PALCO lands would be preserved as a no-harvest public reserve. The reserve area is located approximately between Freshwater Creek to the north and Yager Creek to the south. The same type and range of timber harvest that would occur on the PALCO property outside of the reserve with Alternative 2 would occur with this alternative. Many of the areas that would be harvested under Alternative 4, and that would be visible from important viewing areas, would be visible with Alternative 4. As with the other alternatives, planned timber sales with approved THPs would be carried out.

The following discusses the visual effects Alternative 3 would have on several KVAs in the Project Area.

***KVA 1—FRESHWATER (FRESHWATER-KNEELAND ROAD)***

The effects to visual quality from Alternative 4 would be the same as those described in Alternative 2.

***KVA 2—CARLOTTA (FISHER ROAD)***

The PALCO lands viewed from this KVA would become part of the 63,000-acre, no-harvest public reserve. Harvested areas visible from this location would become revegetated and would eventually return to a preharvest condition. The PALCO lands seen from this KVA would eventually meet the criteria of retention.

***KVA 3 AVENUE OF THE GIANTS (PEPPERWOOD)***

The effects to visual quality from Alternative 4 would be the same as those described in Alternative 2.

***KVA 4—US 101 (OVERLOOK ONE MILE SOUTH OF STAFFORD)***

The effects to visual quality from Alternative 4 would be the same as those described in Alternative 2.

***KVA 5—SR 36 (NEAR ENTRANCE TO GRIZZLY CREEK STATE PARK)***

The MMCA that would be established in Alternative 2 would not be established with Alternative 4. As a result, clearcut harvest units would be visible on the hillside above the state park. A VQO of maximum modification would be met.

***KVA 6—FRESHWATER KNEELAND ROAD (FROM GRANGE ROAD NEAR FRESHWATER)***

The effects to visual quality from Alternative 4 would be the same as those described in Alternative 2.

***KVA 7—GRIZZLY CREEK STATE PARK***

The effects on the view from KVA 7 would be similar to those on KVA 5 under Alternative 4. Because the MMCA would not be established, future clearcut harvest units would be visible on the hillside above the state park boundary. A VQO of maximum modification would be met from this viewpoint.

***KVA 8—HUMBOLDT REDWOODS STATE PARK (NEAR US 101 OVERLOOKING THE EEL RIVER)***

The effects to visual quality from Alternative 4 would be the same as those described in Alternative 2.

### **3.16.2.3 AB 1986 Conditions**

Under the HCP, either the Owl Creek or the Grizzly Creek MMCA would be available for harvest. AB 1986 conditions the expenditure of state funds for acquisition of the Headwaters Forest and other lands on the inclusion of several provisions in the final HCP, the IA, and the ITPs intended to strengthen protections for covered species. Should PALCO include those provisions in the final HCP, state monies would be appropriated to the state Wildlife Conservation Board to fund the state's share of the cost of acquiring approximately 7,500 acres of private forest lands, including the Headwaters Forest. Under AB 1986, the Owl Creek MMCA would be protected from harvest for the life of the ITPs, and the Grizzly Creek MMCA would be protected for five years from the date of the adoption of the final HCP. AB 1986 also appropriates additional funding for the future opportunity to purchase Owl Creek. Any funds remaining from those appropriated for the purchase of the Owl Creek MMCA, could be used to purchase tracts of the Elk River Property and previously unlogged Douglas-fir forest land within the Mattole River watershed.

The state managing agency and management prescriptions are unknown, and these acquisitions are somewhat speculative. Considering the legislative intent behind AB 1986, it is assumed that purchased lands would be managed similarly to the Headwaters Reserve. These anticipated acquisitions would protect old-growth and residual redwood stands and some Douglas-fir stands within these tracts in perpetuity.

Implementation of AB 1986 would result in forested areas being retained near Grizzly Creek Redwoods State Park along Highway 36. As a result, harvest would not occur in those areas, and the existing visual conditions would be retained. The Owl Creek MMCA is not visible from public

roads or viewing points, and thus no effect to visual resources would be expected.

### **3.16.2.4 Cumulative Effects**

#### **Alternative 1 (No Action/No Project)**

The primary cumulative effect of Alternative 1 on visual quality would be an increase in the amount of harvest activity on PALCO lands that would be visible to the public. Because the California Board of Forestry has not designated many areas near PALCO lands as special treatment areas, timber harvest in many parts of PALCO's lands could occur near viewers and might be visually prominent from viewing areas such as highways. The harvest of PALCO and Elk River Timber Company lands along with other private lands would contribute to a change in the visual quality of Humboldt County.

#### **Alternatives 2 (Proposed Action/Proposed Project) and 2A (No Elk River Property)**

Because little of the Headwaters Reserve is visible to the public, the cumulative effects on visual quality with these alternatives would be similar to those described in Alternative 1. The significant difference between these alternatives and Alternative 1 would be public access to the Reserve area (not available now) and could view old-growth redwood groves.

#### **Alternative 3 (Property-wide Selective Harvest)**

By eliminating the use of clearcut silvicultural prescriptions, Alternative 3 would reduce the visual effects of timber harvest on PALCO lands. Alternative 3 would result in less change in the existing visual conditions of PALCO lands compared to the previously discussed alternatives. Therefore, less change would occur in the visual quality of Humboldt County.

#### **Alternative 4 (63,000-acre No-harvest Public Reserve)**

Under this alternative, there would be no harvest of 63,000 acres of PALCO lands located between approximately Yager Creek to the south and Freshwater Creek to the north. This area is less visible from many important viewing areas than the PALCO lands outside of the 63,000-acre, no-harvest public reserve that would remain subject to harvest. These PALCO lands would be harvested in the same manner as Alternative 2. Therefore, on most of the PALCO lands visible to viewers, this alternative would have the same visual effects as Alternative 2.

Within the 63,000-acre, no-harvest reserve and from areas with a view of the no-harvest public reserve, Alternative 4 would have a very different effect than the other alternatives. With Alternative 2, previously harvested areas within the 63,000-acre, no-harvest area would green up, and no new harvest would occur. Lands within the 63,000 acres area would eventually meet the VQO criteria for retention.

#### **3.16.3 Mitigation**

Because there are no effects to visual resources which exceed the threshold of significance, no additional mitigation is required.